JS 1/19/22
RJA 2/16/22

SAT Report for Case # P-18-0030

General

[redacted]

Report Status:	Complete	**Status Date:**	10/31/2017		
CRSS Date:	10/30/2017	**SAT Date:**	10/31/2017	**SAT Chair:**	William Irwin

Consolidated PMN?

Consolidated Set:

Submitter: Miwon North America, Inc.

CAS Number: [redacted]

Ecotox Related Cases: [redacted]

Health Related Cases:

Chemical Name: [redacted]

Use: Acrylate resin for UV-curable industrial coatings. No references found. [redacted]

Trade name: MIRAMER PU3201

PV Max (kg/yr): 12000.0000

Ecotox Assessor:	Alie Muneer	**Fate Assessor:**	Frank Antwi	**Health Assessor:**	A. Babcock

Physical Chemical Information

Molecular Weight:	[redacted]	**Physical State - Neat:**	Liquid		
Percent 500:	[redacted]	**Percent 1000:**	[redacted]		
Melting Point (Measured):		**Melting Point (est):**		**MPD (EPI):**	
Vapor Pressure:		**Vapor Pressure (est):**	<0.000001	**VP (EPI):**	
Water Solubility:		**Water Solubility (EST):**	<0.000001	**Water Solubility (EPI):**	
Log Kow:				**Log Kow (EPI):**	
Log P:		**Log P Comment:**			

SAT Concern

Ecotox Rating (1):	1	**Ecotox Rating Comment (1):**	
Ecotox Rating (2):		**Ecotox Rating Comment (2):**	
Health Rating (1):	1-2	**Health Rating Comment (1):**	
Health Rating (2):		**Health Rating Comment (2):**	

PBT Ratings

Persistence	Bioaccumulation	Toxicity	Comments
3	1	2	

Exposure Based Review (Health)?	
Exposure Based Review (Ecotox)?	N
SAT Keywords:	IRR-S, E, MUTA, ONCO, DEVEL, LIVER, KIDNEY, SENS

Fate Assessment Summary:	P-18-0030 FATE: [redacted] Liquid with MP < 25 °C (E) S = Negl. VP < 1.0E-6 torr at 25 °C (E) BP > 400 °C (E) H < 1.00E-8 (E) POTW removal (%) = 90 via sorption Time for complete ultimate aerobic biodeg > mo Sorption to soils/sediments = v.strong PBT Potential: P3B1 *CEB FATE: Migration to ground water = negl
Removal in WWT/POTW (Overall):	90

Condition	Rating Values w/ Rating Description	Comment
WWT/POTW Sorption:	3	
WWT/POTW Stripping:	4	
Biodegradation Removal:	4	
Biodegradation Destruction:		
Aerobic Biodeg Ult:	4	
Aerobic Biodeg Prim:		

Condition	Rating Values w/ Rating Description	Comment
Anaerobic Biodeg Ult:	4	
Anaerobic Biodeg Prim:		
Hydrolysis (t1/2 at pH 7,25C) A:		
Hydrolysis (t1/2 at pH 7,25C) B:		
Sorption to Soils/Sediments:	1	
Migration to Ground Water:	1	
Photolysis A, Direct:		
Photolysis B, Indirect:		
Atmospheric Ox A, OH:		
Atmospheric Ox B, O3:		

Health Assessment

Health Summary:	Absorption of the low molecular weight fraction ([redacted]) is poor all routes, based on physical/chemical properties. Expect poor Michael addition to the acrylate. There are concerns for eye and skin irritation, mutagenicity, oncogenicity, developmental, liver, and kidney toxicities, and sensitization from the acrylate. No residual isocyanates reported.
Routes of Exposure:	Dermal Drinking Water Inhalation

Test Data Submitted

Test Data Submitted:	

Ecotox Assessment

Test organism	Test Type	Test Endpoint	Predicted	Measured	Comments
Fish	96-h	LC50	*		
Daphnid	48-h	LC50	*		
Green Algae	96-h	EC50	*		
Fish	-	Chronic Value	*		
Daphnid	-	Chronic Value	*		
Green Algae	-	Chronic Value	*		

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute Acquatic:				*
Chronic Acquatic:				*

Ecotox Route of Exposure?	No releases to water

Factors	Values	Comments
SARs:	Nonionic Polymers	
SAR Class:	Nonionic Polymer-insoluble	
TSCA NCC Category?	None	

Recommended Testing

Ecotox Value Comments

Predictions are based on SAR nearest analog for nonionic polymers; [redacted]; liquid with an unknown MP (P); S < 0.001 mg/L (P); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO3; and TOC <2.0 mg/L

Ecotox Factors

Comments

Environmental hazard is relevant to whether a new
chemical substance is likely to present unreasonable risks because the significance of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance.EPA estimated environmental hazard of this new chemical substance using hazard data on analogous chemicals.Based on these estimated hazard values from analogous chemicals, EPA concludes that this chemical substance has low environmental hazard.

- Substance does not fall within a TSCA New
Chemicals Category.
· SAR nearest analog for Nonionic Polymers.
· Low
hazard based on an estimate of no effects at saturation.